

### **REMARKS**

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested. Claims 1-2, 5 and 8 are amended without prejudice or disclaimer. Claims 13-20 are cancelled herewith. New claims 21-32 have been added.

#### **Double Patenting Rejection under 35 U.S.C. §101**

Applicants cancel without prejudice or disclaimer claims 13-20 thus rendering this rejection moot.

#### **Objections to the Specification**

The Office Action comments that essential material is incorporated in by reference as an unpublished U.S. application and that Applicants are required to amend the disclosure to include the material incorporated by reference. Applicants have replaced the reference to attorney docket numbers with U.S. Application numbers. Therefore, Applicants request withdrawal of this rejection.

#### **Objection to Claims 2, 5 and 15**

The Office Action objects to claims 2, 5 and 15 because of informalities. Applicants have amended claims 2 and 5 to address the informalities and therefore requests withdrawal of this objection. Claim 15 is cancelled therefore rendering this objection moot.

#### **Rejection of Claims 15-20 Under 35 U.S.C. §112**

The Office Action rejects claims 15-20 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Applicants have cancelled claims 15-20 thus rendering this rejection moot.

**Rejection of Claims 18-20 Under 35 U.S.C. §112**

The Office Action rejects claims 18-20 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Applicants have cancelled claims 18-20 thus rendering this rejection moot.

**Rejection of Claims 13 and 14 Under 35 U.S.C. §112**

The Office Action rejects claims 13 and 14 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants have cancelled claims 13 and 14 thus rendering this rejection moot.

**Rejection of Claims 1, 7-8 and 11-12 Under 35 U.S.C. §102(e)**

The Office Action rejects claims 1, 7-8 and 11-12 under 35 U.S.C. §102(e) as being anticipated by Devine et al. (U.S. Publication No. 2003/0217190) ("Devine et al."). Applicants have amended claim 1 to recite a method of converting a call flow for a spoken dialog service into a state-based representation. Applicants respectfully submit that Devine et al. fail to teach anything regarding a call flow for a spoken dialog service. Applicants note that paragraph [0007] is cited to anticipate each limitation of claim 1. The first limitation of claim 1 is amended to recite "walking a call flow for a spoken dialog service and converting each page of the call flow into a rule of a higher level representation of the call flow." Applicants note that the amendment to claim 1 has differentiated the call flow as being associated with a spoken dialog service which renders it different from the flowchart taught in Devine et al. Paragraph [0007] teaches a graphical editor such as Microsoft Visio that may be used with a flowchart template to provide an environment which to describe "telecommunication state machines." The drawing package may be employed to draw and save as well as to manipulate or modify "flow chart representations of a telecommunication service." Applicants submit that the amendment to claim

1 renders Devine et al. non-analogous to the present invention inasmuch as the flowchart disclosed in Devine et al. is exclusively taught as being related to a telecommunication service. This is certainly easily illustrated in Figure 1 wherein communication links for a TELCO, ISTN and SS7 protocol are shown. All of the flow diagrams in each figure of the reference relate to managing calls in the telecommunication service. See paragraph [0029]. Thus, Applicants submit that it is easily established that Devine et al. is now non-analogous to the present invention and does not anticipate the method of claim 1. Applicants also note the arguments in related cases Application No. 10/826,064 and 10/826,065 which are incorporated herein by reference and may be applicable to Applicants' arguments the present case.

Accordingly, Applicants respectfully submit that claim 1 is patentable and in condition for allowance as well as dependent claims 7-9 and 11-12.

**Rejection of Claims 2- 3, 5 and 15-16 Under 35 U.S.C. §103(a)**

The Office Action rejects claims 1, 3, 5, 8, 10, 12 and 15-16 under 35 U.S.C. §103(a) as being unpatentable over Devine et al. (U.S. Publication No. 2003/0217190) ("Devine et al.") in view of Mital et al. (U.S. Patent No. 7,184,967) ("Mital et al."). Applicants first note that claims 15 and 16 are cancelled thus rendering this rejection moot.

With regards to claims 2-3 and 5, Applicants respectfully submit that these claims depend from allowable claim 1 and thus are patentable and in condition for allowance. Applicants also note that there are other reasons why claims 2, 3, and 5 are patentable.

First, Applicants submit that one of skill in the art would not have sufficient motivation or suggestion to combine Devine et al. with Mital et al. Second, Applicants respectfully submit that Devine et al. and Mital et al. are both non-analogous to spoken dialog systems and therefore are inappropriately cited as prior art.

To establish a *prima facie* case of obviousness, the Examiner must meet three criteria. First, there must be some motivation or suggestion, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to combine the references. Second, there must be a reasonable expectation of success, and finally, the prior art references must teach or suggest all the claim limitations. The Examiner bears the initial burden of providing some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." MPEP 2142.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). MPEP 2143.01.

Furthermore, if the examiner determines there is factual support for rejecting the claimed invention under 35 U.S.C. 103, the examiner must then consider any evidence supporting the patentability of the claimed invention, such as any evidence in the specification or any other evidence submitted by the applicant. The ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it. With regard to rejections under 35 U.S.C. 103, the examiner must provide evidence which as a whole shows that the legal

determination sought to be proved (i.e., the reference teachings establish a *prima facie* case of obviousness) is more probable than not. MPEP 2142.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in analogous arts. Where the teachings of two or more prior art references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991). MPEP 2143.01.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In addition, even under the more flexible approach under KSR International Co. v. Teleflex Inc. et al., Applicants note that patents composed of several elements are not proved obvious merely by demonstrating the each element was, independent, known in the art. The Office must still identify a reason that would have prompted a person of ordinary skill in the art to combine the elements as the new invention does. We also note that the analysis which may include the apparent reason to combine known elements and the effects of demands known in the community or present in the market place, as well as the background knowledge of a person of ordinary skill in the art, should be made explicit by the Patent Office. In the present case, Applicants submit that the Examiner has not provided convincing or sufficient analysis regarding the apparent reason to combine Devine et al. with Mital et al. After introducing the teachings of Devine et al. and citing paragraph [0007] for the drawing package that allows for the creation of flow charts to be saved in an intermediate language format, the Office Action cites Mital et al. as disclosing a process of converting a workflow into a higher level representation wherein the

XML representation is defined as a context-free grammar. Applicants note that the Mital et al. patent does not represent a “similar method” to Devine et al. when their basic teachings are non-analogous to each other.

This is easily shown by demonstrating that Devine et al. relates to systems and methods for allowing a user to generate state machines by creating and processing a flowchart representative of a telephoning service, such as a call waiting service. See Abstract. The telephony or telecommunication service of Devine et al. is discussed in paragraph [0029]. As can be seen in this paragraph, as well as throughout the disclosure, the telephony or telecommunication service is the service that receives a call into the TELCO trunk 12 that is going to be received and processed according to a call processing procedure 20. These callout numbers are shown in Figure 1. The call processing procedure identifies the subscriber and uses a state table 28 that indicates a current status subscriber (such as a paid-up subscriber) and a state that indicates whether the subscriber is currently idle, off-hook, forwarding calls and so forth. Once the basic data associated with the subscriber is identified, an interpreter 22 can begin processing instructions to handle the call. Applicants simply submit that it is easily identifiable that the system disclosed in Devine et al. is a telecommunication service that handles routing calls and managing subscriber services such as a call waiting service.

The teachings of Devine et al. are in contrast to the teachings of Mital et al. This reference teaches a graphical user interface schedule a program that is provided for modeling business workflow processes. The GUI scheduler includes a tool to allow a user to create a schedule for business workflow processes based on a set of rules defined by the GUI scheduler program. See Abstract. Column 9, line 26 discusses an example of a “business workflow process”. Hence, Mital et al. teach a purchasing interaction diagram shown in Figure 6a. Agents, such as customers, suppliers and shippers are autonomous in that their activities are

concurrent and their lifetimes independent of each other. The interactions between the agents are manifested as exchanges of messages between each other and they disclose an example centered on describing agents in terms of ordering of messages sent and received by the agents and modeling the entire system as a composition of individual agents. A complete purchase occurs in which a product is received by the customer and the product is paid for by the customer representing a complete workflow process. Applicants respectfully submit that although there is a “workflow” taught in Mital et al., as well as a “flowchart” that can represent a telephony service in Devine et al., that these cannot be combined because they are “similar methods” as is asserted on page 11 of the Office Action. These are non-analogous references. They deal with entirely different subject matter when one objectively and with common sense considers the fundamental differences between the technology and flow diagrams used in managing a telecommunication service in contrast to an approach of modeling a business workflow process. Applicants respectfully submit that these references, at least by a preponderance of the evidence, should not be combined.

Applicants note the MPEP §2141.01(a) Section V. in which Wang Laboratories Inc. v. Toshiba Corp., 993 F.2d 858, 26 USPQ 2d 1767 (Fed. Cir. 1993), was discussed in terms of whether they were analogous to the invention. The two cited references in the Wang Laboratories case each disclosed single in-line memory modules (SIMMs) but in a different contexts. One reference was for a SIMM in an industrial controller that the Federal Circuit held was not in the same field of endeavor simply because it related to memories. The SIMMs associated with the claims at issue were intended for personal computers and used dynamic random access memories. Accordingly, because one SIMM was for a personal computer and another SIMM was for developed for use in a large industrial machine controller, the Federal Circuit found the reference non-analogous, and thus could not be cited against the claims.

Similarly, in the present case, Applicants respectfully submit that although both prior art references discuss “flows” of information, that because Devine et al. focuses on a flowchart that represents the processes in telecommunication service, that this fundamentally differs from the graphical user interface schedule program in Mital et al. that is provided for modeling business workflow processes. These references are simply far a field from one another. They are also non-analogous, to the claims which are in the field of spoken dialog systems. Therefore, these references are not prior art to the invention.

Accordingly, Applicants respectfully submit that whether under a broader and flexible approach such as under KSR, the Examiner still must identify an “apparent reason to combine the known elements” in which one must also consider the inferences and creative steps a person of ordinary skill in the art would employ. In the present case, Applicants present that there would be no apparent reason why one of skill in the art would combine these references. In the present case, the analysis would be very difficult inasmuch as the claims relate to spoken dialog systems with its set of technologies, Mital et al. relates to GUI interfaces for modeling business workflow processes, which involves an entirely different set of skills, and Devine et al. which relates to the flow of a telecommunication service with the TELCO, ISDN, SS7 signaling and so forth which clearly involves an entirely different skill set. In other words, one person cannot have skill in all three different arts between the claims and two references. It is almost impossible to set forth a coherent analysis of why any person or combination of people of ordinary skill in the various arts would for some reason combine Devine et al. with Mital et al. in order to arrive at the invention. Applicants respectfully submit that the references are not prior art and if they were, the preponderance of the evidence is against the combination of Devine et al. with Mital et al.

Next, Applicants respectfully submit that even if combined, these references fail to teach each limitation of the claims. As has been noted above, Applicants respectfully submit that



telecommunication service taught in Devine et al. does not include call flows for spoken dialog systems as is required in the claims. Applicants further submit that the context-free grammar of representation in claim 2 is in the context of a spoken dialog system which easily differentiates it from the teachings of the Backus-Naur form in column 17, lines 15-17, of Mital et al. Mital et al. relates to modeling business workflow processes which is non-analogous to the present invention and Applicants respectfully submit that inasmuch as the current analysis requires one of skill in the art to have skill in terms of spoken dialog systems, telecommunication systems and modeling business workflow processes as in Mital et al., that this would require three persons of skill in the art which somehow must have an apparent reason to reach out into all areas of technology and combine these references. Accordingly, Applicants respectfully submit that claims 2-3 and 5 are patentable and in condition for allowance. Applicants also note that further arguments are in the companion cases referenced above which are applicable here.

Claims 15-16 are cancelled rendering the rejection moot as to these claims.

**Rejection of Claims 4, 6, 9-10 and 17 Under 35 U.S.C. §103(a)**

The Office Action rejects claims 4, 6, 9-10 and 17 under 35 U.S.C. §103(a) as being unpatentable over Devine et al. in view of Mital et al. and in further view of Wallace (U.S. Patent No. 4,686,623) ("Wallace"). Applicants respectfully submit that claims 4, 6 and 9-10 each depend from claim 1 and recite further limitations therefrom.

Applicants note that Wallace discloses an invention directed to an attribute analysis technique for use in its compilers and more particularly to a parser-based attribute analysis technique for use in compilers. It is easily identifiable that this reference has nothing to do with call flows associated with a spoken dialog service. Thus, Applicants respectfully submit that the obviousness analysis which includes Devine et al., Mital et al. and further Wallace combines three non-analogous references and thus is easily shown by a preponderance of the evidence to

not provide sufficient motivation or apparent reason to one or more people of skill in the various arts to combine these references. The context-free grammar discussed in Wallace has nothing to do with the grammars of a spoken dialog service and thus for this reason as well as the reasons set forth above and in the companion applications, Applicants submit that the claims 4, 6 and 9-10 are patentable and in condition for allowance.


Applicants have cancelled claim 17 thus, rendering this rejection moot.

**CONCLUSION**

Having addressed all rejections and objections, Applicants respectfully submit that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited. If necessary, the Commissioner for Patents is authorized to charge or credit the **Novak, Druce & Quigg, LLP, Account No. 14-1437** for any deficiency or overpayment.

Respectfully submitted,

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By: \_\_\_\_\_

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